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REMARKS/ARGUMENTS

In the most recent Official Action, the single base Claim 1 was rejected upon each of three prior patents to Schippers, Mears, and Peckinpaugh. In each rejection, the Examiner stated that the recitation of Claim 1

"so that the additional cooling air stream contacts the downwardly advancing filaments only shortly before or after solidification of the filaments within the cooling tube and so that the additional cooling air supply is withdrawn from the cooling tube by the suction generating device"

is merely a process limitation and does not provide structure to limit the apparatus.

It is submitted that the Examiner has overlooked the fact that the recitation in question is drafted in accordance with §112/6 of the patent statute, and the recitation is therefore entitled to an interpretation consistent with the written description of the invention in the application. See *In re Donaldson Co.*, 16 F.3d 1189, 29 USPQ 2d 1845 (Fed.Cir. 1994).

The fact that the recitation in question falls within the purview of §112/6 is confirmed by the guidelines and authorities set forth in Section 2181 of the MPEP. As set forth in the referenced Section, the recitation meets the indicated three prong analysis as follows:

A) While the phrase "means for" is not utilized, the claim limitation is written as a function to be performed and does not recite sufficient structure, material, or acts which would preclude application of the section. Specifically, the claim recitation recites the function of "generating an additional cooling air stream...so that the additional cooling air stream contacts the downwardly advancing filaments...and

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so that the additional cooling air stream is withdrawn from the cooling tube by the suction generating device."

The specification of the present application sets forth an adequate disclosure showing what is meant by the above language. Specifically, several embodiments are disclosed, with Fig. 1 illustrating an embodiment wherein the air supply device 34 comprises a second cooling tube 35 through which the filaments advance and wherein the additional cooling air stream flows opposite to the direction of the filaments. Figs. 2-5 illustrate several embodiments wherein the air supply device 34 connects to the cooling tube so that the additional cooling air stream flows in the direction of the filaments.

B) The second prong of the analysis requires that the traditional "means for" language must be modified by functional language. This is clearly met as noted above.

C) Finally, the analysis requires that phrase must not be modified by sufficient structure for achieving the specified function. In the present case, the recited "air supply device" is not seen to be sufficient to preclude application of §112/6. Rather, the recitation merely renders the language more definite and specific. See in this regard *Ex parte Stanley*, 121 USPQ 621 (Bd.App. 1958), where the recitation "a jet driving device so constructed and located on the rotor as to drive the rotor" was held to be sufficient to invoke §112/6.

§112/6 of the patent statute states that a claim limitation expressed in means-plus-function language "shall be construed to cover the corresponding structure...described in the specification and equivalents thereof". In *re Donaldson*, *supra*, requires that in applying the prior art, it must be considered whether the prior art means can be considered

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equivalent to the corresponding structure described in the specification. If it is not, the claim should be allowed.

Schippers cannot be considered equivalent to the corresponding structure since in the Schippers apparatus, the air entering through the injector tubes 24 is directed away from the vacuum device V, and the vacuum device is inoperative when the injector tubes are operative, note col. 5, lines 64-67 of Schippers. Thus in Schippers, the additional cooling air is not withdrawn from the cooling tube by the suction generating device as claimed. In Paragraph 6 of the latest Official Action, the Examiner has suggested that the Schippers apparatus could be configured to operate as claimed, but the suggested reconfiguration is contrary to the teaching and intended operation of the apparatus, as thus it would not be obvious.

The cited patent to Mears cannot be considered equivalent to the corresponding structure described in the present application, since Mears does not disclose or suggest an apparatus wherein an additional cooling air stream contacts the filament bundle only shortly before or after solidification of the filaments. As pointed out on pages 1-2 of the specification of the present application, the melt spinning apparatus as disclosed by Mears develops an air stream in the cooling tube which assists the advance of the filaments and causes the solidification point EP (note Figs. 2 and 3 of Mears) to move away from the spinneret. This leads to a delayed solidification of the polymer which occurs only in the cooling tube and which favorably influences the physical properties of the yarn. The generation of an additional cooling stream at the entry end of the cooling tube of Mears, which the Examiner contends is suggested by the air-jet means 60, would act to cool the filaments at that location

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and thus reduce the beneficial effects of moving the solidification point away from the spinneret and into the cooling tube. There is no suggestion that this disadvantage can be avoided, and the benefits of the present invention achieved, by providing additional cooling air in the cooling tube so as to contact the filaments only shortly before or after the solidification point. While the claim recitation does not express the permissible distance in terms of precise dimensional units, it would be clear to one reading the disclosure of the present application as a whole, that Mears does not teach or suggest the claimed relationship and the important advantages which flow therefrom.

The cited patent to Peckinpaugh also does not disclose anything which could be considered equivalent to the disclosed invention. There is no teaching or suggestion in Peckinpaugh of the claimed air supply device for generating an additional cooling air stream which contacts the downwardly advancing filaments and is withdrawn as claimed. Rather, Peckinpaugh is concerned with a cross flow quench stack which is employed in conjunction with a fog of water to quench the filaments. Such an arrangement would never be considered equivalent to the apparatus disclosed in the present application for performing the recited functions, as is required by §112/6.

Claim 1 has been amended to correct an obvious error in terminology.

The allowance of Claims 13-14, and the indicated allowability of dependent Claims 6-12, is noted with appreciation.

In summary, it is submitted that all of the pending claims are in condition for immediate allowance, and such action is solicited.

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Respectfully submitted,



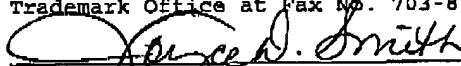
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